

Policy on Trace Fossils and Their Molds and Casts

During a paleontology survey or research project, a researcher may encounter trace fossils that can't be collected. When photographs, measurements, and drawings are not sufficient to properly document the specimen, a mold may be made of the specimen. Trace fossils left in the field are subject to weathering, and over time may be lost. At a minimum, weathering will continue to diminish the quality of details on the specimen rendering them unsuitable for scientific study. This policy also applies to body fossils left in the field from which molds are made.

A high fidelity cast made from the mold should be cataloged into the park's museum collection to serve as a voucher for the trace (or body) fossil left *in situ*. Since latex deteriorates over time the material used to produce the reference cast should be a durable material such as a high quality plaster or resin. The reference cast is then available for future research. That the researcher or resource manager has spent time and effort to mold the specimen in order to provide for its proper documentation is an *a priori* reason for making at least one high fidelity copy from the mold and placing it in the park's collection.

If a cast is to be used as the type specimen for a new ichnotaxa, identify and catalog the first cast made from the mold as the holotype. Cite the NPS catalog number for this cast in any publication.

After the first high fidelity cast is made for the park collection, the researcher may produce subsequent copies (casts) produced from the mold. Researchers may catalog subsequent casts made from the mold and place them in the collections of their home institutions. However, all citations of the specimens should:

- credit the NPS
- identify the park from which the original was collected, and
- provide the NPS catalog number for the cast of the specimen housed at the park

The three dimensional reproduction of NPS specimens is covered in the Museum Handbook Part III, Museum Collection Use, Chapter 5 and this can serve as a guideline for the molding and casting of fossils. Molding and casting a fossil would be a Reproduction (also called a replica): as it results in an exact copy of an original object or specimen in its proportion and size. The cast may be used for exhibition, research, education/interpretation or for commercial purposes such as a sale item in a museum shop. When the park allows others to reproduce park collections for non-NPS purposes it is done through an agreement. The agreement grants permission to a contractor or organization (for profit or nonprofit) to reproduce a museum object for sale or distribution. When you grant permission to one non-NPS individual or organization to reproduce a museum object, you should also allow the same access to other non-NPS individuals or organizations. The NPS does not have the authority to license products or receive royalties or a fee for making a reproduction of a museum object or specimen but a third party, such as the park cooperating association, can license a product on behalf of the park.